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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,475	10/07/2004	Hans-Helmut Gortz	53407	1545

26474 7590 09/06/2005

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WASHINGTON, DC 20005

EXAMINER
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TRUONG, DUC

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

11

<b>Office Action Summary</b>	<b>Application No.</b> 10/510,475	<b>Applicant(s)</b> GORTZ ET AL.	
	<b>Examiner</b> Duc Truong	<b>Art Unit</b> 1711	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☐ Responsive to communication(s) filed on \_\_\_\_.

2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 1-9 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1-9 is/are rejected.

7) ☐ Claim(s) \_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All    b) ☐ Some \*    c) ☐ None of:

- 1. ☒ Certified copies of the priority documents have been received.
- 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
- 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____.
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____.	6) <input type="checkbox"/> Other: ____.

U.S. Patent and Trademark Office  
PTOL-326 (Rev. 7-05)

Office Action Summary

Part of Paper No./Mail Date 083105

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over UK 1187233 in view of Palazzotto, both of record on 1449.

The UK 1187233 discloses a process for preparing polyoxymethylene by polymerizing formaldehyde or trioxane or other source of oxymethylene units, in the presence of an organometallic complex cation of the formula (see pages 1-2).

The disclosure of the reference differ from the instant claims in that it does not disclose the use of a general formula I in claim 1 nor specific catalysts in claims 7 and 9. The Palazzotto reference discloses processes for the initiation of cationic polymerization of epoxy materials in that the oxymethylene is included.

The reference further discloses the salts of the organometallic cation have the formula II (see col. 3, line 60 et seq. in that M is a metal of group VIII such as Pd or Ir (lines 56-57), L7 is cyclic olefinic compounds of less than 100 C, such as cyclopentadiene, cyclohexadiene and cyclooctadiene must be included; pentamethyl-cyclopentadienyl (see col. 5, lines 10-30); L8 is a 4-membered saturated or unsaturated ring containing oxygen such as tetrahydrofuran, Nitriles, CO, amines---(see col. 6, lines 16-54), X is halide or BF<sub>4</sub><sup>-</sup>, PF<sub>6</sub><sup>-</sup>, SbF<sub>6</sub><sup>-</sup>, --- (see col. 8, lines 52 onto col. 9, line 6).

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It would have been obvious to one of ordinary skill in the art to form the oxymethylene as disclosed in UK 1187233 employing the catalyst of Palazzotto in order to gain the advantages of the combination of the references, that being a polyoxymethylene polymer which has the added properties of improving the thermal stability and wavelength of sensitivity (see col. 2, lines 10-12).

UK 1187233 discloses a process for preparing polyoxymethylene<sup>by</sup> contacting a formaldehyde source with an organometallic cation catalyst.

Palazzotto discloses specific organometallic cation can be used for polymerizing epoxy component in that polyoxymethylene is included.

The inclusion of said catalyst in the method for preparing polyoxymethylene would not provide an unexpected result to one of ordinary skill in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Truong whose telephone number is 571-272-1081. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

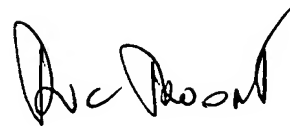
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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Duc Truong', with a stylized, cursive script.

DUCTRUONG  
PRIMARY EXAMINER